

Exploring the cultural appropriateness and
usefulness of an mHealth program for optimal infant
feeding in an urban Aboriginal and Torres Strait
Islander Health Service: Growing healthy at Inala

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I, Annalie Houston declare that this thesis, is submitted in fulfilment of the requirements aware of Master of Health Services (Research), in the Faculty of Health at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise reference or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution. This research is supported by the Australian Government Research Training Program.

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Terminology

Reflecting the cultural diversity and preference of descendants of the original inhabitants of the continent and surrounding islands now called Australia, the terminology “Aboriginal and Torres Strait Islander people” is acknowledged and is consistent with National Health and Medical Research Council (NHMRC) guidelines (NHMRC, 2007, Hayman et al., 2014). The term “Aboriginal” used alone is defined by the person referring to themselves identifying as “Aboriginal and not Torres Strait Islander”. Aboriginal, Aboriginal and Torres Strait Islander and Torres Strait Islander peoples are referred to in the thesis as distinct ethnic groups rather than racial groups. The term “Indigenous” is only used in the thesis to refer to peoples around the world who were the original inhabitants of their lands. The term “non-Indigenous” is used to refer to people who do not identify as either Aboriginal or Torres Strait Islander.

“mHealth”, or “mobile health” is the delivery of health information via mobile technologies such as mobile phones (Misha et al., 2011). The term “app” used throughout the thesis is a shortening of the term “software application”. A mobile “app” is a computer program designed to run on a mobile device such as a Smartphone or tablet (SmartphoneAppsPedia, 2015). A Smartphone is a mobile phone with an advanced mobile operating system which combines features of a personal computer operating system with other features useful for mobile or handheld use. A tablet is a small portable computer that accepts input directly on to its screen rather than via a keyboard or mouse (SmartphoneAppsPedia, 2015).

Abbreviations

ABS	Australian Bureau of Statistics
AHW	Aboriginal Health Worker
AIHW	Australian Institute of Health and Welfare
ATSIHRAC	Aboriginal and Torres Strait Islander Health and Research Advisory Committee
BMI	Body Mass Index
COAG	Council of Australian Governments
CoE	Southern Qld Centre of Excellence in Aboriginal & Torres Strait Islander Primary Health Care
COM-B	Capability-Opportunity-Motivation
GPs	General Practitioners
HREC	Human Research Ethics Committee
iOS	Operating System for iPhone, iPads and iPod touch
NACCHO	National Aboriginal Community Controlled Health Organisation
NHMRC	National Health and Medical Research Council
NSW	New South Wales
PC	Personal Computer
PDA	Personal Digital Assistant
PICF	Participant Information and Consent Form
QLD	Queensland
RCT	Randomised Control Trial
RWG	Rapid Weight Gain
SES	Socioeconomic Status
SMS	Short Messaging Service
UNICEF	United Nations Children's Fund
vs.	Versus
WHO	World Health Organisation

Abstract

Background

Inappropriate infant feeding practices are associated with poor health and may contribute to excess weight gain. Aboriginal and Torres Strait Islander infants have lower rates of breastfeeding, higher rates of early introduction of solids and higher rates of childhood obesity compared to other Australians. There is a lack of evidence about effective and culturally relevant programs addressing infant feeding for Aboriginal and Torres Strait Islander families. The delivery of health promotion programs using mobile phones (mHealth) offers a promising new avenue for engaging Aboriginal and Torres Strait Islander families. The Growing healthy program is an app and website targeting healthy infant feeding practices for parents experiencing socioeconomic disadvantage. Growing healthy at Inala is an exploratory study of this program amongst Aboriginal and Torres Strait Islander families in an urban area.

Objective:

The aims of this study were to explore whether the Growing healthy app is a suitable approach to provide infant feeding support to parents of Aboriginal and Torres Strait Islander infants. Also, to explore the key factors that need to be considered in adapting such a program to ensure that it is culturally appropriate and engaging.

Methods:

This study was conducted at an urban Aboriginal and Torres Strait Islander primary health care service. Two participant groups were involved: parents of Aboriginal and Torres Strait Islander infants aged less than nine months; and clinical staff of the health service. A multiple method approach, with predominantly qualitative methods, was used and comprised of three components. Firstly, an informal discussion with parents was held to explore the appropriateness and acceptability of key messages provided in the program's

app. Secondly, parents used the program for at least six weeks, after which they participated in semi structured interviews. There were two rounds of interviews conducted with most parents, and interviews explored parent's experiences of using the program, and suggestions for improvement. The app analytic data provided insight into how the parents used the program and which messages they accessed. Finally, two group discussions with staff of the health care service were conducted to explore their perceptions of the program.

Results:

Two parents attended the informal discussion and ten parents used the program for at least six weeks and participated in semi-structured interviews. A total of nineteen staff members participated in group discussions with staff. The data suggested that the Growing healthy app has the potential to provide infant feeding support for parents of Aboriginal infants in an urban setting, as it was perceived to be a helpful, consistent, reassuring and an easily accessible source of information and support. Parents raised less concerns with the cultural appropriateness of the app than the staff. Most staff thought modifications were required for the app to be considered culturally appropriate and acceptable. The look and feel of the app were important factors for cultural considerations. Presenting information as stories or real-life experiences in the app were suggestions parents and staff made.

Conclusions:

The findings suggest that the Growing healthy app may be a suitable mode for providing infant feeding support to Aboriginal and Torres Strait Islander families if key cultural insights are considered to maximise engagement and potential impact. While there were differing opinions of the staff and parents about key cultural insights, the parents implied that they accepted the app as it was promoted by a trusted health care practitioner through a trusted health care service.